WHAT IS CLAIMED IS:

1. An implantable device, comprising:

a proximal anchor having at least one helical leg extending between a proximal ring and a distal ring;

a distal anchor having at least one leg; and

an implant configured to be supported by the proximal and distal anchors,

wherein the proximal and distal anchors are configured to be movable between a collapsed delivery position and an expanded position in which the proximal and distal anchors secure the implant to a wall of an organ within a patient.

2. The device of Claim 1, wherein the implant is a diagnostic tool.

3. The device of Claim 1, wherein the implant is a therapeutic tool.

4. The device of Claim 2, wherein the diagnostic tool comprises apparatus operable to measure one or more physiological parameters.

5. The device of Claim 2, wherein the diagnostic tool comprises apparatus operable to measure pressure.

6. The device of Claim 2, wherein the diagnostic tool comprises apparatus operable to measure oxygen levels.

7. The device of Claim 2, wherein the diagnostic tool comprises apparatus operable to measure electrical activity.

8. The device of Claim 3, wherein the therapeutic tool comprises apparatus operable to deliver one or more pharmaceutical agents to the patient.

9. The device of Claim 3, wherein the therapeutic tool comprises apparatus operable to deliver one or more electrical signals to the patient.

10. The device of Claim 1, wherein the implant is selected from the group consisting of one or more of the following: stimulating electrodes, ultrasound transducers, drug delivery systems, pacing leads, and electrocardiogram leads.

11. The device of Claim 1, wherein the implant is a sensor.

12. The device of Claim 11, wherein the sensor is a sensing electrode, oxygen partial pressure sensor or an oxygen saturation sensor.

13. The device of Claim 11, wherein the sensor is a pressure sensor.

14. The device of Claim 1, wherein said proximal anchor comprises at least three legs.

15. The device of Claim 1, wherein the at least one proximal anchor leg passes through substantially a whole number of complete circles between the proximal ring and the distal ring of the proximal anchor.

16. The device of Claim 1, wherein said at least one proximal anchor leg has a lower spring force than said at least one distal anchor leg.

17. The device of Claim 16, wherein the proximal anchor leg and the distal anchor leg are configured to secure the implant to organ walls with varying thicknesses.

18. The device of Claim 1, wherein said anchoring device is made from a biocompatible material selected from the group consisting of: nickel titanium alloys, stainless steel, ELGILOY, and MP35N.

19. The device of Claim 11, wherein the sensor comprises a pressure sensing face configured to measure a fluid pressure in a left atrium of a patient's heart.

20. The device of Claim 19, wherein the proximal and distal anchors are configured to support the sensor such that the pressure sensing face is substantially coplanar with a distal side of an atrial septum wall.

21. The device of Claim 19, wherein the proximal and distal anchors are configured to support the sensor such that the pressure sensing face is spaced distally from a plane of a distal side of an atrial septum wall.

22. The device of Claim 19, wherein the proximal and distal anchors are configured to support the sensor such that the pressure sensing face is spaced proximally from a plane of an atrial septum wall.

23. The device of Claim 1, wherein the proximal anchor, the distal anchor and the implant comprise interlocking structures configured to rigidly secure the proximal anchor, the distal anchor and the implant to one another.

24. The device of Claim 11, wherein the sensor is configured to attach to an electrical lead.

25. The device of Claim 1, wherein at least one member of the group consisting of the proximal anchor, the distal anchor and the implant comprises one or more radiopaque markers configured to facilitate visualization under fluoroscopy.

26. The device of Claim 25, wherein a portion of an element comprising said one or more radiopaque markers is coated with a polymeric material adapted to prevent galvanic corrosion.

27. The device of Claim 25, wherein said one or more radiopaque markers are placed in low flex zones.

28. The device of Claim 27, wherein tips of the at least one distal anchor leg comprise said one or more radiopaque markers.

29. The device of Claim 27, wherein the proximal ring of the proximal anchor comprises said one or more radiopaque markers.

30. The device of Claim 27, wherein the distal ring of the proximal anchor comprises said one or more radiopaque markers.

31. The device of Claim 11, wherein the sensor comprises a cylindrical body with at least one annular groove configured to engage a portion of the proximal anchor or a portion of the distal anchor in order to retain the proximal or distal anchor against axial movement relative to the sensor.

32. The device of Claim 1, wherein the distal anchor comprises a plurality of legs comprising slots configured to promote tissue overgrowth.

33. A system for diagnosing and/or treating a condition in a patient, the system comprising:

an implant configured to be implanted within a patient;

a proximal anchor comprising at least one helical leg configured to expand from a compressed state to a relaxed state;

a distal anchor comprising at least one leg configured to expand from a compressed state to an expanded state;

wherein the proximal anchor and the distal anchor are configured to sandwich an atrial septum wall between the at least one proximal anchor leg and the at least one distal anchor leg and to support the implant in the septum wall; and

a delivery catheter configured to deploy the implant, the proximal anchor, and the distal anchor in the septum wall.

34. The system of Claim 33, wherein the implant is a diagnostic tool.

35. The system of Claim 34, wherein the diagnostic tool comprises apparatus operable to measure one or more parameters selected from the group consisting of: pressure, oxygen and electrical activity.

36. The system of Claim 33, wherein the implant is a therapeutic tool.

37. The system of Claim 36, wherein the therapeutic tool comprises apparatus operable to deliver one or more pharmaceutical agents to the patient.

38. The system of Claim 36, wherein the therapeutic tool comprises apparatus operable to deliver one or more electrical pulses to the patient.

39. The system of Claim 33, wherein the proximal anchor further comprises a proximal ring and a distal ring attached to opposite ends of the at least one helical leg.

40. The system of Claim 34, further comprising a retrieval device configured to grasp the proximal ring of the proximal anchor in the relaxed state, and to retract the proximal ring of the proximal anchor proximally relative to the distal ring, thereby returning the proximal anchor to the compressed state.

41. The system of Claim 40, wherein the retrieval device comprises a cylindrical body with a plurality of distally-extending grasping hooks.

42. The system of Claim 40, wherein the retrieval device comprises a distal ring with at least one distally-extending grasping hook, a proximal ring, and at least one helical leg extending between the proximal ring and the distal ring.

43. The system of Claim 33, wherein the retrieval device comprises a push/pull ribbon.

44. The system of Claim 33, wherein the retrieval head comprises an internal diameter configured to allow the retrieval head to pass over a sensor lead.

45. The system of Claim 33, wherein said proximal anchor comprises at least three legs.

46. The system of Claim 33, wherein the at least one proximal anchor leg passes through substantially a whole number of complete circles between the proximal ring and the distal ring of the proximal anchor.

47. The system of Claim 33, wherein said at least one proximal anchor leg has a lower spring force than said at least one distal anchor leg.

48. The system of Claim 47, wherein the at least one proximal anchor leg and the at least one distal anchor leg are configured to secure the implant to organ walls with varying thicknesses.

49. The system of Claim 33, wherein said anchoring device is made from a biocompatible material selected from the group consisting of: nickel titanium alloys, stainless steel, ELGILOY, and MP35N.

50. The system of Claim 33, wherein the implant comprises a pressure sensor with a pressure sensing face configured to measure a fluid pressure in a left atrium of a patient's heart.

51. The system of Claim 50, wherein the proximal and distal anchors are configured to support the sensor such that the pressure sensing face is substantially coplanar with a distal side of an atrial septum wall.

52. The system of Claim 50, wherein the proximal and distal anchors are configured to support the sensor such that the pressure sensing face is spaced distally from a plane of a distal side of an atrial septum wall.

53. The system of Claim 50, wherein the proximal and distal anchors are configured to support the sensor such that the pressure sensing face is spaced proximally from a plane of an atrial septum wall.

54. The system of Claim 33, wherein the proximal anchor, the distal anchor and the implant comprise interlocking structures configured to rigidly secure the proximal anchor, the distal anchor and the implant to one another.

55. The system of Claim 33, wherein the implant is configured to attach to an electrical lead.

56. The system of Claim 33, wherein at least one member of the group consisting of the proximal anchor, the distal anchor and the implant comprises a radiopaque marker configured to facilitate visualization under fluoroscopy.

57. The system of Claim 56, wherein a portion of an element comprising a radiopaque marker is coated with a polymeric material adapted to prevent galvanic corrosion.

58. The system of Claim 56, wherein the radiopaque marker is placed in one or more low flex zones.

59. The system of Claim 58, wherein the at least one distal anchor leg comprises the radiopaque marker.

60. The system of Claim 56, wherein the proximal ring and/or the distal ring of the proximal anchor comprise the radiopaque marker.

61. The system of Claim 33, wherein the implant comprises a sensor.

62. The system of Claim 33, wherein the implant comprises a pressure sensor having a cylindrical body with at least one annular groove configured to engage a portion of the proximal anchor or a portion of the distal anchor in order to retain the proximal or distal anchor against axial movement relative to the sensor.

63. The system of Claim 33, wherein the distal anchor comprises a plurality of legs having slots configured to promote tissue overgrowth.

64. A system for monitoring a patient for congestive heart failure, the system comprising:

an implantable pressure sensor;

means for contacting a proximal wall and a distal wall of an organ to anchor said pressure sensor to the organ wall.

65. The system of Claim 64, further comprising a means for delivering said implantable sensor and said means for contacting to said organ wall.

66. The system of Claim 65, further comprising a means for retrieving said implantable pressure sensor from the organ wall.

67. A method of monitoring congestive heart failure in a patient, the method comprising:

providing a pressure sensor secured to a proximal anchor and a distal anchor;

delivering the pressure sensor to a hole in an atrial septum of the patient's heart;

deploying the pressure sensor with the proximal anchor on a proximal side of the septum, and the distal anchor on a distal side of the septum; and

monitoring a fluid pressure in the left atrium of the patient's heart.

68. The method of Claim 67, further comprising orienting a sensor face of the pressure sensor to be substantially coplanar with a left atrium side surface of the atrial septum wall.

69. The method of Claim 67, further comprising orienting a sensor face of the pressure sensor to extend beyond the atrial septum into a left atrium of the heart.

70. The method of Claim 67, further comprising orienting a sensor face of the pressure sensor to be proximally recessed with respect to a left atrium side surface of the atrial septum wall.

71. The method of Claim 67, wherein deploying the sensor comprises expanding the proximal and distal anchors to compress the atrial septum wall between the proximal anchor and the distal anchor.

72. A method of monitoring congestive heart failure within a patient, the method comprising:

providing an implantable pressure sensor;

coupling said implantable pressure sensor to a means for anchoring said pressure sensor in an organ wall;

delivering said pressure sensor and said means for anchoring to said organ wall; and

causing said means for anchoring said pressure sensor in said organ wall to expand, thereby capturing said organ wall.

73. The method of Claim 72, further comprising removing said pressure sensor and said means for anchoring from said organ wall.

74. A method of anchoring a device in the heart of a mammal using an implantable cardiac anchoring device, the method comprising:

providing an implantable cardiac anchoring device comprising a proximal anchor having at least one helical leg and a distal anchor having at least one linear leg;

attaching an implant to the implantable cardiac anchoring device;

positioning a tubular delivery catheter in a wall of a patient's heart;

inserting said implant and said implantable cardiac anchoring device into said tubular delivery catheter; and

deploying said implant and said implantable cardiac anchoring device such that said implant is retained in the wall.

75. The method of Claim 74, wherein attaching an implant further comprises providing a diagnostic tool or therapeutic tool.

76. The method of Claim 74, wherein attaching an implant further comprises providing apparatus selected from the group consisting of one or more of the following: sensors, stimulating electrodes, ultrasound transducers, drug delivery systems, pacing leads, and electrocardiogram leads.

77. The method of Claim 74, wherein attaching an implant comprises providing a pressure sensor having a pressure sensing face.

78. The method of Claim 74, wherein said providing an implantable cardiac anchoring device comprises placing said anchoring device into a lumen of a delivery catheter and advancing said cardiac anchoring device through said lumen to a distal end of the delivery catheter.

79. The method of Claim 78, wherein deploying said implant comprises withdrawing said delivery catheter while holding said anchoring device in a desired location, said anchoring device being configured to relax to an expanded shape in which the anchoring device is secured in a desired location within a patient.

80. The method of Claim 74, wherein providing an implantable cardiac anchoring device comprises inserting said anchoring device into said delivery catheter in a first compressed shape, and wherein said deploying comprises expanding said anchoring device to a second expanded shape.

81. The method of Claim 74, wherein attaching said implant to said implantable cardiac anchoring device comprises providing at least one locking tab extending from the implantable cardiac anchoring device and configuring the tab to engage in an annular groove in the implant.

82. The method of Claim 75, wherein deploying said sensor comprises orienting a sensor face to be substantially coplanar with a surface of the wall.

83. The method of Claim 75, wherein deploying said sensor comprises orienting a sensor face to be located distally from a surface of the wall.

84. The method of Claim 75, wherein deploying said sensor comprises orienting a sensor face to be located proximally to a surface of the wall.

85. The method of Claim 75, wherein deploying the sensor comprises anchoring said pressure sensor in an atrial septum wall so as to measure a fluid pressure in the left atrium of the heart.

86. The method of Claim 74, further comprising providing one or more radiopaque markers on the delivery catheter, the proximal anchor, and the distal anchor; and wherein the markers are employed during said deploying so as to facilitate visualization of the delivery catheter, the proximal anchor, and the distal anchor.

87. The method of Claim 74, further comprising promoting tissue overgrowth by providing slots in the at least one leg of said distal anchor.

88. A retrieval device configured to retrieve a cardiac anchoring device from a position deployed in a wall of an organ within a patient, the retrieval device comprising:

a retrieval head comprising a plurality of grasping hooks extending from a distal end thereof;

a ribbon of sufficient length to extend from a retrieval location within a patient to a location outside of a patient; and

wherein the grasping hooks are configured to engage a proximal ring of a proximal anchor.

89. The retrieval device of claim 88 wherein the grasping hooks comprise return legs oriented so as to be substantially perpendicular to a longitudinal axis of the retrieval device.

90. The retrieval device of claim 88, wherein the grasping hooks comprise return legs oriented so as to be substantially parallel to a longitudinal axis of the retrieval device.

91. The retrieval device of Claim 88, wherein the retrieval head comprises a substantially cylindrical body with an axial slot configured to permit the diameter of the cylindrical body to increase or decrease.

92. The retrieval device of Claim 88, wherein the retrieval head comprises an internal diameter configured to allow the retrieval head to pass over a sensor lead.

93. The retrieval device of Claim 88, wherein the retrieval head comprises a plurality of helical legs extending between a proximal ring and a distal ring, and wherein the grasping hooks extend distally from the distal ring.

94. The retrieval device of Claim 93, wherein the helical legs pass through a substantially whole number of complete circles between the proximal and distal rings.

95. A method of retrieving a cardiac anchoring device from a heart of a patient using a retrieval device, the method comprising:

placing a retrieval device in a delivery catheter, the retrieval device comprising a retrieval head with a plurality of distally-extending grasping hooks and a control ribbon attached to the retrieval device;

guiding said delivery catheter into a position adjacent an sensor device anchored to a wall of the patient's heart;

engaging a proximal ring of a proximal anchor secured to said sensor device;

pulling said proximal ring of said proximal anchor into said delivery catheter;

holding the sensor device stationary while pulling the retrieval device, the proximal ring of the proximal anchor and the delivery catheter proximally, thereby returning an anchor leg of said proximal anchor to a compressed position;

advancing said delivery catheter distally while holding the proximal anchor and the sensor device stationary to compress at least one expanded leg of the distal anchor attached to the sensor device;

pulling the sensor device, the proximal anchor and the distal anchor completely into the lumen of the delivery catheter; and

removing said delivery catheter from the patient.